

FIG. 1

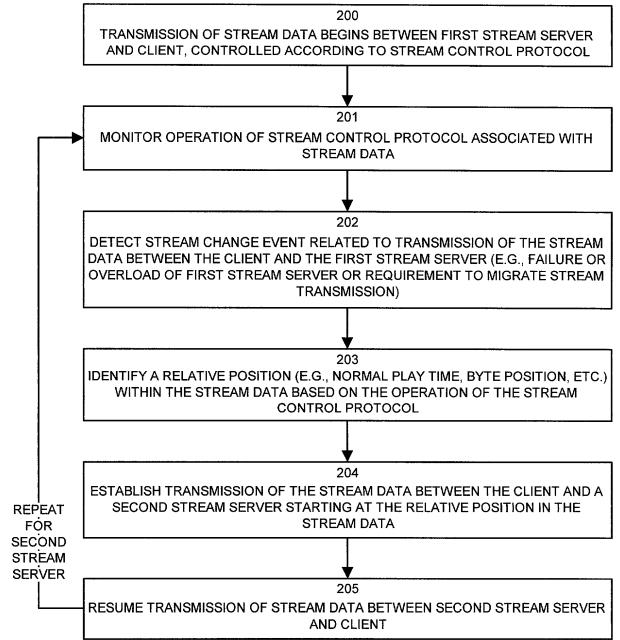


FIG. 2

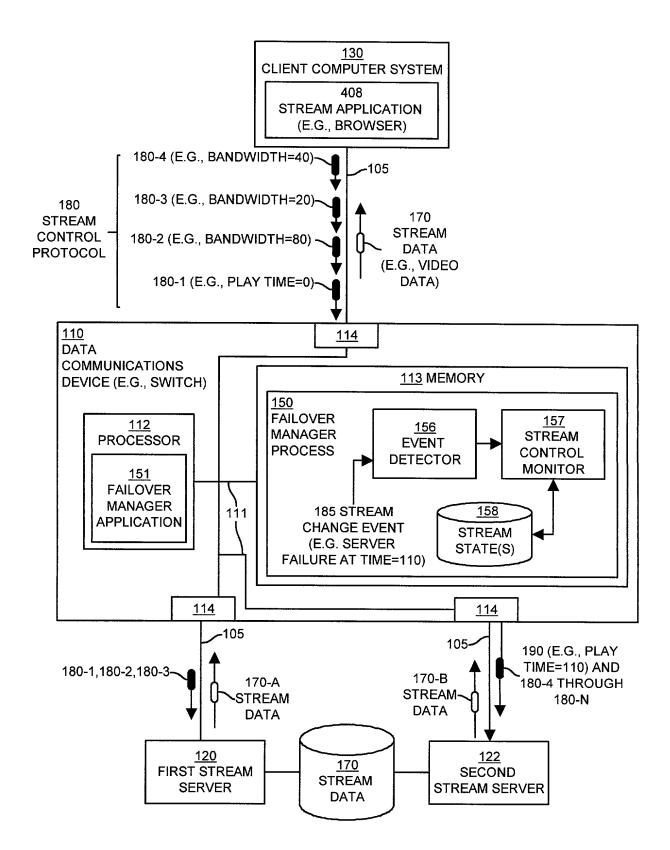


FIG. 3

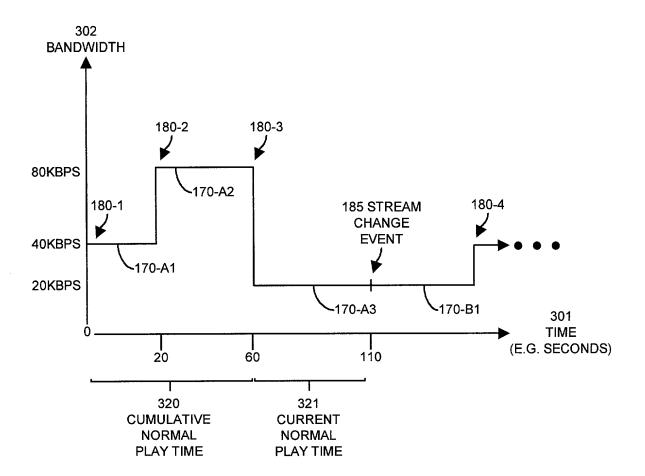


FIG. 4

401

MONITOR OPERATION OF THE STREAM CONTROL PROTOCOL ASSOCIATED WITH THE STREAM DATA TRANSMITTED BETWEEN THE CLIENT AND THE FIRST STREAM SERVER

402

INTERCEPT A STREAM ADJUSTMENT MESSAGE (I.E., CURRENT) OF THE STREAM CONTROL PROTOCOL (E.G., REAL TIME DATA TRANSFER PROTOCOL), THE STREAM ADJUSTMENT MESSAGE INDICATING AN ADJUSTMENT (E.G., PLAY AT OFFSET, BANDWIDTH CHANGE, ETC.) TO A TRANSMISSION CHARACTERISTIC OF THE STREAM DATA (E.G., REAL TIME DATA)

403

UPDATE A STREAM STATE ASSOCIATED WITH THE STREAM DATA BASED ON THE STREAM ADJUSTMENT MESSAGE

404

CALCULATE A CURRENT AMOUNT OF STREAM DATA TRANSMITTED BETWEEN
THE CLIENT AND THE FIRST STREAM SERVER FROM A TIME BETWEEN
RECEIPT OF A FORMER STREAM ADJUSTMENT MESSAGE AND RECEIPT OF
THE CURRENT STREAM ADJUSTMENT MESSAGE (WHILE ACCOUNTING FOR
OVERHEAD CONDITIONS IN THE STREAM DATA)

405

CALCULATE A CURRENT NORMAL PLAY TIME ASSOCIATED WITH THE STREAM DATA BASED ON THE CURRENT AMOUNT OF STREAM DATA AND A VALUE OF A BANDWIDTH ADJUSTMENT OF THE FORMER STREAM ADJUSTMENT MESSAGE

406

ADD THE CURRENT NORMAL PLAY TIME TO A CUMULATIVE NORMAL PLAYTIME MAINTAINED WITHIN THE STREAM STATE ASSOCIATED WITH THE STREAM DATA

407

STORE CUMULATIVE NORMAL PLAY TIME IN THE STREAM STATE ASSOCIATED WITH THE STREAM DATA

408 DETECT STREAM CHANGE EVENT

409

DETECT FAILURE OF ABILITY OF FIRST STREAM SERVER TO TRANSMIT THE STREAM DATA TO THE CLIENT

OR

410

DETECT THAT THE FIRST STREAM SERVER INDICATES AN OVERLOAD OF SERVING STREAM DATA

OR

411

DETECT A STREAM CHANGE INDICATOR WITHIN (E.G., EMBEDDED) THE STREAM DATA TRANSMITTED BETWEEN THE CLIENT AND THE FIRST STREAM SERVER INDICATING TRANSMISSION OF THE STREAM DATA IS TO BE MIGRATED FROM THE FIRST STREAM SERVER



412

IDENTIFY A RELATIVE POSITION (E.G., NORMAL PLAY TIME, BYTE POSITION, ETC.) WITHIN THE STREAM DATA BASED ON THE OPERATION OF THE STREAM CONTROL PROTOCOL

413

CALCULATE THE RELATIVE POSITION WITHIN THE STREAM DATA BASED ON THE UPDATED STREAM STATE, THE RELATIVE POSITION INDICATING A CURRENT LOCATION (E.G., TIME OR BYTE OFFSET) IN THE STREAM DATA RELATIVE TO A PREDETERMINED LOCATION IN THE STREAM DATA (E.G., THE BEGINNING) AND CORRESPONDING TO A POSITION IN THE STREAM DATA AT WHICH TO BEGIN TRANSMISSION BETWEEN THE CLIENT AND THE SECOND STREAM SERVER

414

CALCULATE A CURRENT AMOUNT OF STREAM DATA TRANSMITTED BETWEEN THE CLIENT AND THE FIRST STREAM SERVER FROM A TIME BETWEEN RECEIPT OF THE CURRENT STREAM ADJUSTMENT MESSAGE UNTIL DETECTION OF THE STREAM CHANGE EVENT (WHILE ACCOUNTING FOR OVERHEAD CONDITIONS IN THE STREAM DATA)



415

CALCULATE A CURRENT NORMAL PLAY TIME ASSOCIATED WITH THE STREAM DATA BASED ON THE CURRENT AMOUNT OF STREAM DATA AND A VALUE OF A BANDWIDTH ADJUSTMENT OF THE CURRENT STREAM ADJUSTMENT MESSAGE



ADD THE CURRENT NORMAL PLAY TIME TO A CUMULATIVE NORMAL PLAYTIME TO PRODUCE THE RELATIVE POSITION WITHIN THE STREAM DATA, THE RELATIVE POSITION REFLECTING AN ELAPSED TIME POSITION WITHIN THE STREAM DATA THAT COINCIDES WITH THE STREAM CHANGE EVENT

